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ABSTRACT

 The two techniques for advanced standing treated here are (1) the Advanced Placement Program administered by the College Entrance Examination Board and (2) the various plans that enable superior students to take courses in nearby colleges and universities while they are completing their high school programs. Some outcomes of advanced standing practices are: improved communication between the high schools and colleges; greater emphasis on program planning to accommodate individual student abilities and achievements: the opportunity for advanced standing students to include in the collegiate programs studies that they might not normally have had time to pursue: and financial savings to students whose stay in college is shortened by acceleration. Hore than 25 percent of the 'four-year colleges and universities subscribe to the principles of the CEEB program, and a number of institutions have developed other advanced standing programs. Reports on the performance of advanced standing students indicate a high degree of satisfaction with this means of motivating superior students and providing them with opportunities to progress at the rates at which they are capable. (Author/LBH)

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in Higher Education

Number 8

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US DEPARTMENT OF HEALTH
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Highlights*

- Advanced standing programs enable superior students to receive appropriate placement and college credit for college-level work completed during their high school years.
- 2. Some outcomes of advanced standing practices are:
 - a. Improved communication between the high schools and colleges.
 - b. Greater emphasis on program planning to accommodate individual student abilities and achievements.
 - c. The opportunity for advanced standing students to include in their collegiate programs studies which they might not normally have had time to pursue.
 - d. Financial savings to students whose stay in college is shortened by acceleration.
- 3. More than a fourth of the 4-year colleges and universities subscribe to the principles of the Advanced Placement Brogram administered by the College Entrance Examination Board. A number of institutions have developed other advanced standing programs to conform with local conditions.
- Éach college devises its own policies and practices for granting students advanced standing for college work mastered in high school.
- 5. Reports on the performance of advanced standing students indicate a high degree of satisfaction with this means of motivating superior students and providing them with opportunities to progress at the rates of which they are capable.



NEW DIMENSIONS in Higher Education

Number 8

Advanced Standing

by
SHIRLEY A. RADCLIFFE, Research Assistant
Programs Branch, Division of Higher Education

Winslow R. Hatch, Editor Clearinghouse of Studies on Higher Education Division of Higher Education

U.S. DEPARTMENT OF •
HEALTH, EDUCATION, AND WELFARE
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FOREWORD

AMERICAN EDUCATION is committed to the maximum development of the talents of every student, as an objective and an ideal. While the need for these talents is growing, the task of their full development becomes more complex as enrollments increase and as individual differences in background and preparation become The most promising avenues of progress greater among students. toward the goal of maximum individual development seem to be those which provide flexibility in the rate, depth, and breadth ofstudy. Advanced standing is one of several means used by institutions to provide this flexibility. Related practices, such as early admission and credit by examination, are to be treated in later issues of the series "New Dimensions in Higher Education."

This publication shows how organized advanced standing programs provide flexibility by permitting academically able students to take college-level work during their high school years and to receive appropriate placement and college credit after their admission to college.

The two techniques for advanced standing treated here are: (1) the Advanced Placement Program administered by the College Entrance Examination Board, whereby students receive advanced standing in college on the basis of college-level work which they have completed in high school, and (2) the various plans which enable superior students to take courses in nearby colleges and universities, while they are completing their high school programs. . .

The major sources of data have been journal articles, materials on file at the College Entrance Examination Board, and consultation with persons prominent in the field. Valuable assistance was also provided by the following representatives of the College Entrance Examination Board: Jack W. Arbolino, director of the Advanced Placement Program, David A. Dudley, and Charles R. Keller, former directors, Samuel A. Kendrick, vice-president for examinations and research, and Paul Hazlett, research associate

References to advanced standing programs at individual institutions are intended to be illustrative only, since it would not be within the scope of this report to describe all of the growing number of such programs.. A first draft of this publication was submitted to directors of advanced standing programs at a number of insti-



• tutions. Their comments and those of others familiar with programs or research in the field have been incorporated in the final draft. Editorial assistance in the preparation of the manuscript was provided by Lanora G. Lewis of the Office of Education staff.

Homer D. Babbidge, Jr. Assistant Commissioner for Higher Education

HAROLD A. HASWELL Director, Higher Education Programs Branch



ADVANCED STANDING

WHILE ATTEMPTING to provide higher education for all who can profit by it, institutions are seeking to make available programs appropriate to a broad array of individual needs and individual differences. Because it is urgent that opportunities be provided for superior students to progress at their own rates, many educators and other citizens are examining critically those traditional curricular patterns based on conformity of individual progress to group requirements. For example, the Rockefeller report, The Pursuit of Excellence, recommends "... many educational patterns—each geared to the particular capacities of the student for whom it is designed." This suggests that the typical curriculum designed for groups of students progressing at the average rate is no longer adequate for all students and must either be supplemented or replaced with new techniques which provide greater flexibility in meeting curricular requirements.

During the past decade, there has been an expansion of efforts to provide challenging programs for superior students. Honors and independent study programs have increased, and many faculties are taking a new look at credit by examination, early admission to college, and advanced standing.

The pattern of advanced standing, with which this publication is concerned, has developed partially as an answer to some of the objections to early admission. Like early admission, advanced standing enriches the programs of superior high school students with college work; unlike early admission, however, it requires that the students complete high school programs before enrolling full time in college. On the basis of college-level work completed during high-school years, the advanced standing students receive appropriate placement and credit according to the policies established by the institutions they enter. In other words, advanced standing students literally skip college work for which there has been adequate coverage during the high school years.

Advanced standing, as the term is used in this publication, is defined as the pattern which enables superior students to receive appropriate placement, credit, or both, on the basis of the college-level

¹ The Pursuit of Excellence. Education and the Future of America, Special Studies Project, Report V. Rocketeller Brothers Fund. Garden City, N.Y., Doubleday & Company, 1958, p. 32.



courses they have taken in high school. Accordingly, it embraces both the Advanced Placement Program administered by the College Entrance Examination Board and those programs administered by individual colleges and universities which admit superior students to college courses while they are finishing their high school work. Since the scope of this publication does not permit description of all of the growing number of advanced standing programs, institutional references are intended to be illustrative only.

The Advanced Placement Program

The Advanced Placement Program of the College Entrance Examination Board is an outgrowth of two studies financed by the Fund for Advancement of Education, the General Education in School and College Study and the School and College Study of Admission with Advanced Standing.

The first of these, a study of the academic records of 344 graduates of Andover, Exeter, and Lawrenceville who were members of the 1951 graduating classes of Harvard, Princeton, and Yale, was/conducted by a committee representing the schools and colleges involved and resulted in the report General Education in School and College. study revealed considerable overlap of subject matter in the general education programs of many capable students during the last 2 years. of high school and the first 2 years of college. Based on their findings, the committee recommended "the adoption of a coordinated 7-year program for qualified students as an alternative to the usual 4 years of secondary school and 4 years of college leading to the B. A. degree." 2 About the same time, the president of Kenyon College was promoting a plan designed to coordinate and enrich the general education of academically able students in the schools and colleges. 'The result was the experimental program known as the School and College Study of Admission with Advanced Standing, begun in the fall of 1952. Seven schools offered college-level courses during 1953-54 and 12 colleges agreed to grant advanced placement, credit, or both to students who performed creditably in the courses and en the examinations. The program continued as the School and College Study of Admission with Advanced Standing during 1954-55. It was renamed the Advanced Placement Program when the College. Entrance Examination Board assumed responsibility in 1955-56.

One of the major features of the Advanced Placement Program is that the responsibility for providing an enriched and challenging aca-



² General Education in School and College. Cambridge, Mass., Harvard University Press, 1952, p. 112.

demic program for superior students is shared by the high school and the college. "Each must make substantial departures from well established routines to permit the individual students to break out of the customary lock step." The high schools teach the courses; the colleges place the students and credit them with the work; and the College Entrance Examination Board coordinates the program.

Subject committees composed of representatives from the high schools and colleges have prepared suggested criteria and syllabi for the courses. The CEEB Advanced Placement Examinations in which essay questions predominate, are given in literature and English composition, American history, European history, French, German, Latin, Spanish, mathematics, biology, chemistry, and physics. Each examination estimates the level at which the student should begin his college study. Committees of readers, representing both high schools and colleges, grade the essay questions and assign scores ranging from 5 (high honor) to 1 (failure). The Educational Testing Service scores the objective questions. The examination papers and interpretations, with the school's recommendations and descriptions of the advanced placement courses, are then sent to the colleges.

Articulation, or the lack of it, is an age-old educational problem. The Advanced Placement Program is making substantial contributions toward improved communication between high school and college. Teachers from both levels work together on the committees. In addition, they meet at the summer conferences sponsored by the program coordinators. Illustrative of the scope of this activity are the conferences which were held during the summer of 1960: for administrators, Lawrenceville School (N.J.); for biology teachers, University of Colorado; for chemistry teachers, University of Illinois; for English teachers, Smith College (eastern conference), Northwestern University (western conference); for history teachers, Stanford University; for foreign language teachers, Hotchkiss School (Connecticut); for mathematics teachers, Case Institute of Technology; and for physics teachers, Columbia University.

In 1960, Bowdoin College and the University of Denver independently sponsored Advanced Placement Summer Institutes in chemistry, the University of Michigan in Latin, and Yale University in biology, chemistry, mathematics, and physics. In addition, the New York State Department of Education financially supported Advanced Placement Workshops in American history at Vassar College, biology at Manhattan College, chemistry at Colgate University, English at Cornell University, and mathematics at New York City College.



[†] Bridging the Gap Between School and College, Evaluation Report No. 1. New York, The Fund for the Advancement of Education, 1953. p. 57.

The Growth of the Program

The Advanced Placement Program has increased from the 12 institutions originally participating to over 400 colleges and universities which subscribe to the principles of the Advanced Placement Program. This number represents slightly more than a fourth of the 4-year institutions of higher education. In 1955-56, 1,229 students from 104 high schools took 2,199 examinations and entered 130 colleges. In 1959-60, 10,531 students from 890 schools took 14,158 examinations and entered 567 colleges.

Although the program has grown rapidly, the number of participating high schools is relatively small in comparison to the total number in the United States. The tendency for a large number of advanced placement candidates to enroll in a small number of colleges and universities is also a limiting factor. Thirteen colleges in 1958 and 18 in 1959 enrolled approximately half of the advanced placement, candidates.

There are signs that this situation is changing. Interest has been generated by the growing number of universities participating in the Advanced Placement Program and some State education agencies are encouraging its use. In Ohio, the presidents of the 6 State-supported institutions have issued a statement endorsing the program, and 40 of the private and church-supported institutions have indicated their willingness to grant placement or credit. A full-time officer has been appointed to coordinate the activities of the program within the State. Working closely with the coordinator is the Ohio Council on Advanced Placement, an advisory committee of representatives from the colleges and universities. The program includes regional conferences for secondary school administrators and regional subject conferences for high school and college teachers.

The Oregon Council on Advanced Placement, formed in the spring of 1960, is composed of representatives from the high schools, colleges, State Department of Education, and associations of school administrators and teachers. The Council hopes to increase the number of Oregon high schools which offer advanced placement courses by helping them establish the courses.

In Arizona, the interest in the program by the University and Tucson school officials resulted in a 2-day conference held at the University in March 1958. An outcome of the conference has been the development of advanced placement course outlines through the cooperative efforts of University and high school teachers.



Based on the number of institutious responding to the Office of Education Opening (Fall) Enrollment Survey, 1959.

^{*} College Entrance Examination Board, A Guide to the Adequated Placement Program, 1960-61. New York, The Board, 1960, p. 8.

In one Pittsburgh high school, two professors from Carnegie Institute of Technology, one on full-time leave, taught the advanced placement courses in English and history during 1959 60, while the two high school teachers they replaced taught at Carnegie. The exchange was preceded by a 4-week summer planning institute at Carnegie for teachers of English and history.

Groups in New York, North Carolina, and Virginia are studying the Advanced Placement Program as one of the plans for enhancing the programs of superior or gifted students. The New York State Department of Education has approved the program as a plan for the education of the gifted and, as previously noted, sponsored Advanced Placement Workshops during the summer of 1960. The Governor and legislature of North Carolina appointed a commission to study programs for the gifted, including the Advanced Placement Program. The Virginia General Assembly passed a resolution to study the program as a method for encouraging capable students to work to full capacity.

An additional stimulus was given by the Rockefeller report, which recommends the Advanced Placement Program as one way to provide challenging study for young people of outstanding ability.

College and University Policies

The changing attitudes of the colleges toward advanced placement make it difficult to keep abreast of current policies which vary from one institution to another. Of 360 colleges surveyed in the spring of 1958, 150 granted placement and 210 granted both placement and credit to students who had successfully completed advanced placement courses and had done creditably on the examinations. Of those colleges which granted credit, some placed restrictions on the amount but most granted the credit with no limitations.

The policy for granting credit runs the gamut from advanced placement with a positive declaration of "no credit" to the granting of as much as a year's acceleration. The colleges which have had the longest experience with the program seem more likely to grant credit without reservation. In many institutions, considerable variation exists among the departments with respect to advanced placement or the granting of credit. Thus, an institution may have a blanket policy, or it may have policies which vary from one department to another.

¹ David A. Dudley, "The Advanced Flacement Program," The Bulletin of the National Association of Secondary-School Principals, Vol. 42; Dec. 1958, p. 3.





The Pursuit of Excellence, op. cit., p 31.

- General policies in institutions include the following:
 - 1. Placement in an advanced course with credit for the prerequisite.
 - 2. Placement in an advanced course with no credit for the prerequisite.
 - 3. Credit for one semester of the freshman course.
 - 4. Credit for a parallel course.
 - 5. Credit toward the general education requirements.
 - 6. No credit but exemption from the general education requirements.
 - 7. A limit in the amount of credit awarded.
 - 8. Unlimited credit awarded.
 - 9. The award of credit dependent upon the successful completion of one or two semesters of college.
 - 10. Advanced placement or the award of credit validated by departmental proficiency examinations.

The following examples of practices at specific institutions illustrate this variety of policies. One of the various procedures at Yale University enables successful students to obtain exemption from one or more of the distributional requirements taken by all degree candidates; the exemptions may be converted into course credits at the end of the freshman year. The University of Michigan grants to successful advanced placement candidates credit up to a maximum of 16 semester hours of which no more than 8 may be in any one examination, area. At Harvard, Princeton, and Yale universities, students who earn advanced placement credit in three or more year courses may qualify for sophomore standing. At Dartmouth College, sophomore standing can be achieved by students who earn credit for five or more term courses spread over at least three different subject areas. Columbia University grants advanced placement credit on the basis of the student's score on the Advanced Placement Examination and his college performance during the freshman year. The maximum amount of credit that may be carned is 24 points. applicable to the 126 points required for graduation. The French, German, and Spanish departments of Ohio State University place successful advanced placement students in advanced courses but the award of credit depends upon their performance on the departmental proficiency examinations. The biology department at the University, however, grants credit on the basis of the Advanced Placement Examinations, but advanced standing is dependent upon performance on the departmental proficiency examinations.

Just as the policies for granting credit vary, so do the criteria. For example, Harvard and Yale universities have similar policies with regard to qualifications for awarding sophomore standing, but their criteria for granting credit differ. Harvard automatically grants credit in most departments on the basis of a score of 3 or more on the

Advanced Placement Examination, which is also one of the criteria at the University of Michigan. Yale and the University of Colorado require a grade of 4 or 5. Dartmouth and Princeton consider the composite of a number of factors, among which are the results of the CEEB Advanced Placement and Achievement tests and the high school record.

Among the reasons for diverse policies are the differences in the course content of the freshman curriculum at the colleges and universities, the attitudes among faculties toward plans which break from the traditional, their viewpoints concerning enrichment and acceleration, and the degree of acceptance of the Advanced Placement Examinations.

Curricular variance at the institutions precludes a standard practice in advanced placement practices. For example, the content of the Advanced Placement Examination in mathematics is calculus. Therefore, the successful student may be placed in the sophomore course in a college which includes calculus as part of its regular freshman program, or in a junior course where calculus is the sophomore mathematics course. Each institution adapts the program to its own curriculum.

Although the first reaction of college faculties is to be cautious toward relaxing curricular requirements, experience with the program seems to help overcome initial reluctance, and the degree of acceptance seems to be related to the number of advanced placement students enrolled. The same may be said for the formulation of policy. Colleges and universities appear hesitant about establishing formal policies until after they have had actual experience with the program.

Some college and university staff members feel that acceleration may act at cross purposes with institutional objectives and result in sacrifice of breadth and depth of study. This opposition to acceleration often contributes to a conservative attitude toward the granting of credit for advanced placement courses. Experience shows, however, that few students finish high school with enough advanced placement courses to accelerate their college careers to any large extent and that, of those who do qualify for as much as a full year's acceleration, many elect to stay in college 4 years. For example, a survey of the plans of 97 students who qualified for a full year's acceleration at Harvard between 1956 and 1958 showed that 34 students intended to remain in college 4 years; of the remaining 63 students, 16 had not formulated their plans, 45 planned to go on to graduate or professional school, and only 2 students expected to enter immediately upon careers after graduation in 3 years.

⁻ Edward T. Wilcox, A Report to the Faculty on the Program of Advanced Standing. Cambridge, Mass. Harvard College, April 1, 1959, Table IV, p. 12.



The recognition of the advanced placement courses as college-level work probably is the most important factor contributing to the success of the program. College action with respect to advanced placement and credit hinges upon such recognition. The granting of college credit for creditable performance in the advanced placement courses and examinations actually indicates the acceptance of the courses as of college caliber. The program director at Harvard College makes the following statement about the reasoning which underlies Harvard's policy of granting advanced placement credit without reservation or further validation:

. . . no professor teaching a middle-group course would think of re-examining the sophomores who come to him from the freshman courses in the college. It is not necessary to get an honor grade in a sophomore course before receiving credit retroactively for a freshman offering; a student does not have to take a second-year English course in order to get credit for the first-year English course, and so on. The policy decisions [at Harvard] with respect to college courses taken in secondary school therefore stem-directly from parallel policies with respect to courses taken in the college itself.

Another question arises from the fact that some staff members are reluctant to accept the Advanced Placement Examinations as a measure for the award of credit. Review of the examinations and other data regarding the student are available to the institutions, however. Harvard, which accepts automatically the score earned on the Examinations as a matter of administrative expediency, believes this is sound policy, but notes that its continuation depends upon the procedures and standards for grading the examinations.¹⁰

Some Evaluative Data of the Advanced Placement Program

A study of the 1954 advanced placement group by the Educational Testing Service¹¹ shows that, of those receiving credit at one of the original 12 colleges, 45 percent stood in the upper sixth of their college classes and that their performance was higher in the courses which were preceded by advanced placement courses.

More recent reports from individual institutions also show that advanced placement students have been doing creditably. Harvard, which enrolls a large number of advanced placement students (a third of the 1958 entering freshmen were advanced placement examinees), finds that "Advanced Placement students are doing well in advanced courses—considerably better than undergraduates whose preparation was a Freshman course at Harvard." Evidence of



Edward T. Wilcox, "Advanced Placement at Harvard," College Board Review, No. 41, Spring 1960, p. 18.
 Ibid., p. 20.

¹¹ Bayes M. Norton," College Admission With Advanced Standing: Report of the Committee on Chemistry," Journal of Chemical Education, Vol. 33, May 1956, p. 233.

¹² Edward T. Wilcox, A report to the Faculty on the Program of Advanced Standing, op. cit., p. 10.

creditable work are the grades earned by the 806 students (1954-58) who took sequent advanced courses during their first year at Harvard: 29.6 percent earned A; 40.5 percent, B; 24.6 percent, C; 3.8 percent, D; 1.5 percent, E.¹⁴

Compared with the number of all advanced placement candidates, relatively few Harvard students have qualified for sophomore standing: 2 students received sophomore standing in 1955, 13 in 1956, 33 in 1957, 55 in 1958, and 84 in 1959. To 6 the 48 students who achieved sophomore standing between 1955 and 1957, "72.9% were on the Dean's List, as against 39.2% of the College as a whole."

The report also includes the following three examples of how the program helped individual students at M.I.T. One was able to take graduate subjects in mathematics in his junior and senior years by early completion of the prerequisite subjects in his field. A sophomore given credit and placement in mathematics and chemistry was using the released time to take more subjects in philosophy and literature than he normally would have. A freshman who received advanced placement in chemistry, physics, and mathematics could plan to complete the requirements for the master's degree in mathematics in 4 years.

A statement headed "Opportunities for Superior Students at Williams College" appeared for the first time in that institution's 1958 catalog, although advanced placement had been used there earlier. A 1959 report notes that the advanced placement students have done well in the advanced courses at Williams and that their good performance has encouraged faculty members to become "more aware than ever before of superior students and of the need of doing some-



[&]quot;Sequent advanced courses are those which follow directly the college level work done in secondary school.

¹⁴ Edward T. Wilcox, "Advanced Placement at Harvard," op. cit., p. 20.4

¹³ Admission to Harrard College, A Report by the Special Committee on College Admission Policy. Cambridge, Mass., Harvard University, Feb. 1960, p. 42.

¹⁶ Edward T. Wilcox, A report to the Faculty on the Program of Advanced Standing, op. cit., p. 12.

¹⁷ David A. Dudley and Eugene R. Chamberlain, "The College Board Advanced Placement Program-

A Progress Report," California Journal of Secondary Education, Vol. 33, March 1958, p. 184.

¹⁸ Ibid., p. 185.

thing special for them, in freshman and sophomore years as well as

in junior and senior years. ?' 19

The four students who received advanced placement in history at Williams in 1954 graduated with honors-three in history and one in biology. Of the students who took the advanced history course in 1957 none received grades lower than C the first semester and all received B or above the second semester.20

In general, reports from the high schools have been enthusiastic. Newton High School (Massachusetts) reports about advanced placement students that:

Emotionally they are proving to be more mature than their fellows, better , able to accept the challenges to their intelligence and curiosity, less inclined to hunt for excuses for not studying. . . . 21

Comments quoted from alumni of the Broax High School attest their enthusiasm and indicate that advanced placement courses were at least as good as first-year college courses, broadened student outlook, and increased appreciation for learning.22

Problems Encountered in Advanced Placement Programs

Although in essence the procedure of advanced placement seems -simple, problems arise because of diverse standards coupled with - * rather uniform methods of measuring credit.

Among the problems caused by the diversity of educational standards and pointed out at the Advanced Placement Administrators' Conferences is the transfer of advanced placement credit from one college to another. Review of the Advanced Placement Examinations is the policy of many colleges which give initial recognition for this work, but the examination of the transfer student may not be available for this purpose. Thus, there arises the question of whether the second institution will accept advanced placement credit by transfer on the same basis as it accepts other credit or whether it will follow the policies it uses in evaluating its own advanced placement students.

The specific course requirements for admission to some graduate and professional schools and ROTC units may also cause problems as the number of undergraduate schools participating in the Advanced

11 Harold B. Gores and Leo Barry, "College-Level Courses in Secondary, School," Reprint of College

Board Review, No. 28, Winter 1956, p. 3.



¹⁹ Charles R. Keller, Superior Students at Williams College, May 1959. (Mimeographed.) , Advanced Placement Examinations in History. Talk given at the Fourth Yale Conference on the Teaching of the Social Studies sponsored by the Yale University Master of Arts in Teaching Program, New Haven, Conn , April 4, 1959. (Mimeographed)

²² Alexander Breinan, "The School and College Program of Admission with Advanced Standing," High Points, Vol. 38, Dec. 1956, p. 21, also, Edward Frankel, "The Advanced Placement Programman Blology," The American Biology Teacher, Vol. 21, Dec. 1959, p. 355.

Placement Program increases. With regard to the ROTC units, Princeton University reports that advanced placement credit in mathematics and physics meets the specific requirements of its various ROTC units.²³

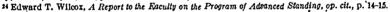
The program director at Harvard points out three problems which may be intensified for advanced placement students: (1) Some students who skip the freshman year may not have backgrounds in certain subjects which normally begin in college (e.g., philosophy, social relations, economics) and may restrict their fields of concentration to those subjects of precollege familiarity; (2) acceleration may unduly affect initial choice of majors or may make changes in fields of concentration difficult; and (3) departmental reluctance to credit advanced placement courses toward the field of concentration may result in overconcentration.²⁴

In the high schools, advanced placement problems stem principally from factors related to school finances. Participation in the program has been confined for the most part to independent schools and to relatively large urban schools. It has been difficult to attract rural and small schools into the program because of the cost of providing additional instructional staff and facilities. Even those high schools which otherwise have the facilities to offer the courses sometimes have the problem of a teacher ratio which is not flexible enough to permit scheduling classes for advanced placement students.

Although the Advanced Placement Program has progressed rapidly, its impact in terms of numbers is still relatively small. Its greatest contribution is qualitative, and it is for this reason that it should be commended and encouraged as a means of allowing superior students to progress according to their capacities. If the program continues to grow at its present rate, its influence on teaching-learning techniques could extend to the total student enrollment in the high schools. At the same time, a substantial number of advanced placement students in the colleges could raise the quality of many courses, or could result in an expansion of independent study or honors programs.

There is one danger that some colleges and universities may encounter, however. The growth of advanced placement could cause changes in admissions policies to the extent that competition would eliminate talented students who did not have access to advanced placement courses. Institutions which face this problem may need to adjust their admissions policies accordingly.

²³ Advanced Placement and Standing, 1959-1960," Official Register of Princeton University, Vol. 50 Supplement, May 15, 1959, p. 1.





Other Programs of Advanced Standing

The Advanced Placement Program is only one of several procedures which the colleges employ to enrich the programs of superior students through advanced standing. The organization, national character, and publicity of the program administered by the College Entrance Examination Board make it by far the best known. Nevertheless, some colleges and universities have developed their own independent programs of advanced standing in order to meet the needs of their particular communities. Many of the institutions which have developed such programs also participate in the CEEB program.

Somewhat like the CEEB Advanced Placement Program is the Statewide Cooperative Program for Superior Students in Connecticut. This has been administered by the University of Connecticut since 1955-56. In this program, qualified teachers in certain approved high schools supplement the regular high school work of eligible students with material regularly included in the freshman courses of the University. Students who satisfactorily complete the courses receive full college credit from the University. During the first year, 75 to 80 students from 9 high schools participated.

Unlike the Connecticut program and the typical program sponsored by CEEB, in which the instruction in college-level work is given by the high-school staff, other forms of advanced standing have been established in which the colleges have the major responsibility for enriching the programs of high school students. For example, the College Supplemental Program in American History, sponsored by the University of Rochester, extends the Advanced Placement Program to able students in small high schools which cannot feasibly offer the courses. This program supplements high school work in American history through special classes taught by the University staff and directed toward preparation for Advanced Placement Examinations.

Another form of advanced standing is used by colleges and universities which permit superior high school students to take regular freshman courses concurrently with their high school studies. Among those reported are Brooklyn College, Ohio State University, University of Akron, University of California (Berkeley and Los Angeles), the University of Illinois, University of Minnesota, University of Pennsylvania, University of Redlands, and Washburn University of Topeka. A recent survey in California reports that 28 of the State's junior colleges have such programs for gifted high school students. The survey revealed further that student performance has ranged from average to superior.

^{23 &}quot;College-High School Liaison for the Talented," The Newsletter of the Inter-University Committee on the Superior Student, Vol. 3, Feb. 1960, pp 25-26.



Brooklyn College began its auditing program in February 1958. Under the program, qualified high school seniors may take freshman courses either for credit or as auditors. By June of 1959, 54 students from 6 high schools had participated, 42 completing the courses with credit and 12 as auditors.

Ohio State University admitted four students from the University High School to mathematics courses in 1957-58. During the summer, the program was expanded and 11 students from nine high schools enrolled in 10 courses distributed among eight different departments. Although the program has been successful, it is expected to be replaced by advanced placement courses in the local high schools. During its first 2 years of operation, the program admitted 58 students who took 103 courses with a grade-point average of 3.41 (A=4; B=3).

In the fall of 1958, the University of California, Los Angeles, permitted 40 superior students from two nearby high schools to take university courses. These 40 students completed 73 courses totalling 223 units with a grade-point average of 3.3 (A=4; B=3). No grade was lower than C and 188 units were B and above. During the spring semester, 39 students participated. These students took 63 courses totalling 184 units and earned a 3.48 grade-point average.

Since not all of the students intended to enroll at UCIA, inquiries were made to find out whether the credit would be accepted by other institutions. All but one of the colleges in which the students intended to enroll agreed to accept the credit. The one college planned to validate the credit by a proficiency examination. Because this first year was considered experimental, student fees were deferred by the University."

In 1959-60, participation in the program was extended to all public and private high schools within 8 miles of the UCLA campus. From 11 cooperating schools, 92 students participated in the program. During the fall semester, these students completed courses totalling 510 units and earned a grade-point average of 3.4. Again no grade was below C and 451 units were B and above. Unlike the first year, the University did not defer its fees for these students; however, funds were available for those who indicated financial need.

Reports from UCLA show that the students performed as well, or better, in their continuing high school studies as they did prior to their participation in the program on the college campus. Of the first group, many were National Merit Scholarship finalists and recipients of other scholarships and prizes. A report from the Student Counsel-



²⁹ Biennial Report of the President of Brooklyn College for the Academic Years 1957-1959. New York, Brook-lyn College, p. 51.

r Eli-Bobol, "UCLA's Special Program for High School Students," The Newsletter of the Inter University Committee on the Superior Student, Vol. 2, Nov. 1959, pp. 14-17.

ing Center of the University ²⁸ quotes student comments indicating that the program provided an effective bridge between high school and college life, broadened student interests, stimulated learning, and improved learning habits. The Center report indicated further that the students felt a personal gain by having available such campus resources as the library, lectures, and plays.

Among the institutions reported to admit superior high school students to summer session courses are the University of Arizona, the University of Louisville, Vanderbilt, Purdue, the University of Mis-

souri, Northwestern at Evanston, and Stetson University. .

Supported by a grant from the Carnegie Foundation, the University of Louisville initiated an experimental program in 1958 to admit high school students to the college for summer study. Forty students were selected for participation from public and parochial high schools in the area and were awarded scholarships to attend the two 5-week summer sessions. Each student took one 3- or 4-hour course. The 39 students completed 78 courses, received A in 25, B in 39, and C in 14.

In general, the extension of university facilities to high school students is particularly helpful in those instances where superior students attend secondary schools which do not have the facilities to offer college-level work. There are also other advantages in programs given under college or university auspices. The apportunity to study in the actual college environment, besides providing challenging experience, helps make adjustment to the first full year easier. The high schools can initiate and conduct the programs with relative ease and little expense, although there is the problem of scheduling classes to permit time for commuting between high school and college. The colleges do not have to use supplemental measures of student achievement to determine whether the courses are of college caliber, inasmuch as the courses are part of the regular curriculum. The chief disadvantage is to the high schools which miss, the stimulating experience of offering college-level work.

Summary.

Colleges and universities which offer advanced standing, either through cooperation with the Advanced Placement Program or through the operation of their own programs, recommend it as one means of permitting able students to progress at rates of which they



¹¹ Memo from UCLA Student Counseling Center, May 1959. (Duplicated.)
11 J. Oppenhelmer, "Experiment at Louisville," The Newsletter of the Inter-University Committee on the Superior Student, Vol. 1, Oct. 1958, pp. 7-9.

are capable. They report that advanced standing programs stimulate and motivate superior students to supplement or replace what could otherwise be for them a tedious or uninspiring program of study. Other advantages of the pattern of advanced standing are:

- 1. Communication between schools and colleges is facilitated through the meetings between high school and college teachers. Their mutual concern over reducing the amount of duplication in the academic programs of superior students is a major contribution toward better articulation between the high schools and colleges and better cufriculum planning as both levels.
- The nature of advanced standing requires that student programs be planned individually, to conform to particular abilities, needs, and interests. This individual planning may result in improved teaching and learning methods for all students.
- 3. Advanced standing enables students to extend their collegiate studies to areas for which they might not otherwise have time.
- 4. Acceleration by means of advanced standing programs assists students financially by permitting them to reduce the time needed to complete work for the degree. The financial savings may help some students to pursue graduate study which they might otherwise have been unable to afford.

Currently, the College Entrance Examination Board has assigned a research associate to study its Advanced Placement Program. The present plans include a survey of a representative group of institutions to determine the reasons for participating or not participating in the program, a summary of the accomplishments of the participating high schools, an analysis of the curriculums and examinations based on the opinions of scholars in the respective fields, and a statistical analysis of the scores.

A comparative study of the various advanced standing programs would be impracticable until more data are available. At the present time, there are insufficient data to show the extent to which the various programs complement, supplement, or overlap each other.

Although advanced standing in general has arrived at the point where it can be recommended with reasonable assurance, there is a noticeable lack of evaluative data. The reports from the few institutions which have published data about the progress of students who earned advanced standing indicate a confidence in the philosophy behind advanced standing practices and a conviction that the programs are highly successful in achieving their goal to enhance the education of superior students. However, there is need for objective data from a greater number of participating institutions. Such reports not only would help in developing educational patterns to accommodate the superior student but might conceivably contribute to improved teaching-learning techniques and new curriculum theories applicable to all students.



Among questions still to be answered are the following:

- 1. What are the reasons or philosophies which underlie the various policies and procedures for granting advanced standing in the institutions?
- 2. What evaluative procedures should be used to measure the effectiveness of advanced standing?
- 3. What is the effect of advanced standing on the social adjustment of the participating high school and college students?
- 4. What is its effect on the total acedemic program in the college or university, including admissions, curriculum outlines, and graduation requirements?
- 5. How do advanced standing practices affect the total teaching learning climate in the high schools and colleges?



APPENDIX

Advanced Standing in Selected Colleges and Universities

THE FOLLOWING DESCRIPTIONS summarizing advanced standing practices in selected institutions are intended to be illustrative only, since a number of other institutions also have programs of advanced standing. For further information, the interested reader should consult the publications listed in the footnotes or write directly to the individual institutions.

Brooklyn College 1

In addition to the auditing program which permits able students to take college courses while completing high school, Brooklyn College began to offer credit in . February 1958 for college-level courses taught in the high schools. In the beginning, the credit was validated by the edirse examinations of the College. In 1959, the College discontinued giving validation examinations and now grants advanced placement on the basis of the scores on CEEB Advanced Placement Examinations, supplemented by specific requirements in some departments.

Cornell University 2

Within the College of Arts and Sciences, freshmen may qualify for advanced placement or credit through creditable performance on the CEEB Advanced Placement Examinations or, in some subjects, on course examinations given by the college departments. Advanced placement is offered in English and foreign languages. Advanced placement and credit for introductory courses may be carned in biology, chemistry, history, Latin, mathematics, and physics.

Dartmouth College 3

At Dartmouth, qualified students may be eligible for both eredit and advanced placement. The award of credit is determined by the departments on the basis of the CEEB Achievement and Advanced Placement tests, the departmental tests administered during Freshman Week, school records, and personal interviews.

Freshmen who receive advanced placement credit for five or more Dartmouth term-courses in three or more subject areas may enter the sophomore class and are credited with a sufficient number of additional unspecified courses to make up the total of nine normally carried in the freshman year. The students must meet the independent reading requirements of the sophomore year and the English, foreign language, and divisional distributive requirements for the degree.

Students who receive credit for four Dartmouth term-courses in two subject areas may receive a full year of advanced standing by fulfilling the following con-

^{*} Recognition of Exceptional Preparation. Hanover, N. H., Dartmouth College, April 1960, pp. 4-6.



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¹ Biennial Report of the President of Brooklyn College for the Academie Years 1957-59. New York, Brooklyn College, pp. 51-52.

Advanced Placement of Freshmen. Ithaca, N.Y., College of Arts and Sciences, Cornell University, 1956.
(Flier.)

ditions before the beginning of the sophomore year: (1) satisfaction of the English and foreign language requirements and all but three of the division distributive requirements for the degree, of which not more than two are in any one division, and (2) credit for two courses in addition to the normal freshman program. Students who meet these requirements before the beginning of the sophomose year receive admission to the junior class and are credited with a sufficient number of additional unspecified courses to make up the total of nine normally carried in the sophomore year.

Qualified students may also receive exemption from the distributive requirements. Although this does not result in credit, advanced placement, or eligibility for advanced standing, it does allow a wider choice of courses by eliminating from the student's program the courses in which he has demonstrated competence.

Harvard University 4

For many years, Harvard and Radeliffe students have been able to qualify for advanced placement through departmental examination. Since 1954, students have been able to achieve advanced standing by successful performance on the CEEB Advanced Placement Examinations. A score of 3 or better on the examinations qualifies students for advanced placement in most departments. In French literature and chemistry, the requirement is a score of 4 or better. Calculus is a prerequisite for advanced placement in physics. Although there are no advanced placement examinations in Far Eastern history, Greek, music (harmony), and Russian, students may qualify for advanced standing in these subjects through departmental examinations.

Students who receive formal advanced placement in three or more courses qualify for sophomore standing. Students who receive advanced placement in one or two courses may substitute independent study, but the advanced standing in these cases carries no reduction of the requirements for the degree. If the college work of these students is of honors quality, they may substitute independent study for one or two courses in the form of expanded tutorial graduate work applicable toward a higher degree, private research, or similar activity not covered by undergraduate courses.

Massachusetts Institute of Technology 8

Either through the Advanced Placement Program or the M.I.T. examinations for advanced standing M.I.T. students may receive advanced placement and credit in chemistry, English composition and literature, American and European history, and mathematics. Because the advanced placement physics course usually taught in the secondary schools does not parallel either half of the 2-year M.I.T. physics sequence, credit in this subject is infrequently granted. Students who have taken the advanced placement foreign language courses and examinations are encouraged to move ahead to a level commensurate with their abilities.

Ohio State University 6

There are three ways in which students may earn advanced standing credit at Ohio State University: the University placement examinations, departmental proficiency examinations, and the CEEB Advanced Placement Examinations.

Adranced Placement and Credit. Columbus 10, Ohio, The Ohio State University, March 1959.



Advanced Standing at Harvard and Radeliffe, Cambridge, Mass., Harvard University, September 1958.

^{*} A Guide to Admission with Advanced Placement and Credit at M.I.T. Cambridge, Mass., Massachusett's Institute of Technology, October 1959.

The English, foreign language, and mathematics placement examinations administered to newly admitted students provide well-prepared students with the opportunity for earning college credit. The following excerpt from a report on the placement process in mathematics is illustrative of this procedure:

... Before the start of the Autumn Quarter of 1958, approximately 5000 audents took the mathematics placement test. The summary below indicates each of the five classes into which students were separated and shows the approximate number of students placed in each class.

About 100 students were placed in Class 1. They received ten quarter hours proficiency credit and could enroll either for Math 418 or for Math 440, the courses in analytic geometry and calculus, respectively.

About 400 students were placed in Class 2. Each of these students received five hours proficiency credit if he enrolled in Math 422, Special. The course covers in one quarter the college algebra and trigonometry which normally requires two quarters.

About 1900 students were placed in Class 3. These students may enroll either in Math 410 or in Math 421, the beginning college level courses, each containing some algebra and some trigonometry.

A student tentatively placed in Class 3 by the screening test is next given an examination covering algebra and trigonometry to decide if he is entitled to advanced placement. If he shows that he is outstanding in algebra and trigonometry, he is placed in Class 1. If he seems well prepared, but not outstanding, he is placed in Class 2. Otherwise, he remains in Class 3.7

A second means through which students may earn credit are the departmental proficiency examinations that are similar to the final course examinations. Performance satisfactory to the department qualifies the student for advanced work and credit in one or more fields. Through this method students may acquire credit equal to three full quarters of college work.

Through creditable performance in the advanced placement courses and the CEEB examinations, students may earn advanced placement and credit in chemistry, English, American and European history, Latin, mathematics, and physics. Students may receive credit in biology but advanced placement depends upon their performance on the departmental proficiency examinations. Conversely, in French, German, and Spanish, students may receive advanced placement for outstanding performance on the CEEB examinations but credit is dependent upon their performance on the departmental proficiency examinations.

Princeton University 8

Decisions regarding advanced standing are made at Princeton on an individual basis, determined from the student's performance on the CEEB Achievement and Advanced Placement tests and his school record and recommendations. Available to qualified students are the following: (1) advanced placement, (2) credit toward fulfilling the distribution requirements and the proficiency requirement in mathematics or foreign language, (3) credit toward reducing the number of elective courses in the upperclass years, permitting the substitution of graduate work or independent study, (4) advanced standing (sophomore in the first year of residence or junior in the second) if advanced placement is earned in three or more subjects.



⁷ W. Wallace Stover, "Math Placement Tests Measure High School Product," Ohjo Schools, Vol. 37, May 1959, p. 42.

[&]quot;Advanced Placement and Standing, 1959-1960," Official Register of Princeton University, Vol. 50 Supplement, May 15, 1959, pp. 1-11.

For many years, the University has administered two plans of advanced standing which are available to superior freshmen. In the Three-Year Plan, the student omits the sophomore year and receives the A.B. degree in 3 years upon completion of the regular upperclass program. In the Special Program in the Humanities, the sophomore year consists of junior departmental work in history or in one of the humanities departments, the junior year is devoted to senior departmental work, and the senior year comprises independent study in the humanities and culminates in a senior thesis of substantial scope and depth.

University of Michigan !

The College of Literature, Science, and the Arts grants ctedit for scores of 3, 4, or 5 on the Advanced Placement Examinations up to a maximum of 16 hours, of which no more than 8 may be in any one examination area. For a score of 2, each case is evaluated individually by the college department concerned.

Where the advanced placement course is parallel to one in the college, course credit applicable toward the University distribution requirements is awarded. For credit in courses not corresponding to any college course, departmental credit is awarded and may be applied toward University distribution requirements at the discretion of the Administrative Board. Placement is dependent upon the performance of the student and on how closely the advanced placement course corresponds to the college course. In general, students are not permitted to take for college credit those courses corresponding to the advanced placement courses they took in high school.

Williams College 16

At Williams, students who have successfully completed advanced placement courses and examinations receive credit toward graduation and placement in courses not ordinarily available to freshmen. With the permission of the Dean, advanced placement students may also register for more courses than is usually allowed and thus can accelerate their college programs.

Yale University 11

The long-standing practices of advanced standing at Yale have been brought together to harmonize with the objectives of the Advanced Placement Program. The brochure describing Yale's policies notes that able students may enrich their programs

... in many ways: immediate enrollment in advanced courses; earlier selection of the area of major study and, consequently, earlier association with those faculty members who will direct the major study; omission of one or more courses during the later years of undergraduate study in order to concentrate on individual research, selection of one or more graduate courses while still an undergraduate; combining Senior Year with the first year of a graduate program ..., facilitating a year of study abroad during the undergraduate years; [and] ... acceleration for the student who obtains Course Credit for at least three full year courses, either prior to entrance or delayed.



General Information on the Granting of College Credit and Placement for Students Entering the University of Michigan with Experience in the Advanced Placement Program of the College Entrance Examination Board, undated. (Mimeographed.)

¹ Williams College Bulletin. Williamstown, Mass., Williams College, April 1959, pp. 21-25.

¹¹ Advanced Placement and Credit for Entering Freshman. New Haven, Conn., Yale University, September 1959,

A student automatically qualifies for credit for a full year course by completion of an advanced placement course or its equivalent and earning a grade of 4 or 5 on the Advanced Placement Examination. Credit in three full year courses provides the student with the opportunity to graduate in 3 instead of 4 years. Students who receive three or more course credits are classified as freshmen the first year and may enter the junior class the following year.

On the basis of their school record and the results of the CEEB Achievement or Advanced Placement tests, students are awarded exemption from related distributional requirements which must be satisfied by all degree candidates. The award of distributional credit qualifies the student for advanced placement in a particular area of study or enables him to move into other areas. The recipient of one or more distributional credits may convert them into a similar number of course credits if he maintains a strong record during the freshman year and applies for the delayed credit at the end of the year.

In the 1958 freshman class of 1,007 students, 719 received 1,332 distributional credits and took 749 advanced courses. Course credit was awarded to 158 students of whom 38 received credit for three or more full year courses. In the 1959 freshman class of 1,032 students, 759 neceived 1,479 distributional credits and took 1,036 advanced courses. Course credit was awarded to 216 students, of whom 25 received credit for three or more full year courses.



BIBLIOGRAPHY

- The Advanced Placement Program in Independent Secondary Schools. Boston, Mass., National Council of Independent Schools, May 1959. 40 p.
- "Advanced Placement and Standing: 1959-1960," Official Register of Princeton University. Vol. 50, Supplement, May 15, -1959, pp. 1-11.
- The Arizona Conference on the Advanced Placement Program and Science Education at the University of Arizona, Tucson, Arizona, March 24 and 25, 1958. 34 p.
- Bridging the Gap Between School and College, Faluation Report No. 1. New York, The Fund for the Advancement of Education, 1953. 127 p.
- Breinan, Alexander, "The School and College Program of Admission with Advanced Standing," High Points, Vol. 38; Dec. 1956, pp. 13-23.
- "Cooperative Program for Superior Students," The University of Connecticut Bulletin, Vol. 52; June 1956, pp. 1-7.
- Bulletin of the Ohio Council on Advanced Placement, Vol. 1; April 1960, pp. 1-4.
- College Admission with Advanced Standing, Announcement and Bulletin of Information. The School and College Study with Advanced Standing, Jan. 1954. 91 p. (Place of publication not shown.)
- College Entrance Examination Board, Advanced Placement Program. New York, The Board, 1956. 136 p.
- Advanced Placement Program Syllabus. New York, The Board, 1958.
- _____, Establishing Advanced Placement Courses in the Schools. New York, The Board. Undated.
- ——, A Guide to the Advanced Placement Program, 1960-61. New York, The Board, 1960. 11 p.
- "College-High School Liaison for the Talented," The Newsletter of the Inter-University Committee on the Superior Student, Vol. 3, Feb. 1960, pp. 20-26.

 (Published monthly during the academic year by the University of Colorado on behalf of the University Honors Information Service of the Inter-University Committee on the Superior Student, Hellems 112, University of Colorado, Boulder, Colorado.)
- Cornog, William H, "Initiating an Educational Program for the Able Students in the Secondary School," The School Review, Vol. 65; Spring 1957, pp. 49-59.
- Douglas, Edwin C, "The College Entrance Examination Board's Examination for Advanced Placement in Mathematics," The Mathematics Teacher, Vol. 50, Oct. 1957, pp. 458-61.
- Dudley, David, A., "The Advanced Placement Program," College and University, Vol. 34, Winter 1959, pp. 171-79.
- ——— and Chamberlain, Eugene R., "The College Board Advanced Placement Program—A Progress Report," California Journal of Secondary Education, Vol. 33; March 1958, pp. 183-85.

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- Elicker, Paul E., ed., The Bulletin of the National Association of Secondary School Principals, Vol 42; Dec. 1958, pp. 1-171.
- Frankel, Edward, "The Advanced Placement Program in Biology," The American Biology Teacher, Vol. 21, Dec. 1959, pp. 351-58.
- Furniss, W. Todd, "The University, the High Schools, and the Superior Student,"

 Ringalianal Research Bulletin. Vol. 37, Oct. 8, 1958, pp. 169-71.
- Geffner, Saul, "Teaching College Chemistry to Selected High-School Seniors,"

 Journal of Chemical Education, Vol. 33; May 1956, pp. 241-43.
- General Education in School and College, Cambridge, Mass., Harvard University Press, 1952. 142 p.
- Gores, Harold B. and Barry, Leo, "College-Level Courses in Secondary School," College Board Review, No. 28, Winter 1956, pp. 1-6. (Reprint).
- "High School Students Earn Credit Toward University Entrance," The Bulletin of the National Association of Secondary-School Principals. Vol. 42, February 1958, pp. 86-88.
- Keller, Charles R., "Articulation," Harvard Graduate School of Education Bulletin, September 1958. (Reprint.)
- ----, "A Dynamic Eighth Grade," The Clearing House, Vol. 34, Nov. 1959, pp. 131-33. (Reprint.)
- _____, "Let the Teachers Meet," Association of American Colleges Bulletin, Vol. *44. March 1958, pp. 21-25.
- , "Superior Students at Williams College," May 1959. (Mimeographed.) McCulloch, Samuel C., "Discovering the Talented Student: Liaison with the High Schools," The Newsletter, of the Inter-University Committee on the Superior Student, Vol. 2, Oct. 1959, pp. 15-18.
- Norton, Bayes M., "College Admission with Advanced Standing: The Examinations in Chemistry, 1954-55," Journal of Chemical Education, Vol. 33, May 1956, pp. 237-41.
- , "College Admission with Advanced Standing: Report of the Committee on Chemistry," Journal of Chemistry Education, Vol. 33, May 1956, pp. 232-37.
- Palfrey, John, 'Is Acceleration a Threat to the Liberal Arts College?" The Newsletter of the Inter-University Committee on the Superior Student, Vol. 3, Oct. 1960, pp. 14-16.
- Paschal, Elizabeth, Encouraging the Excellent. New York, The Fund for the Advancement of Education, Nov. 1960. 80 p.
- The Pursuit of Excellence, Special Studies Project, Report V, Rockefeller Brothers Fund, Inc., Garden City, N.Y., Doubleday & Company, Inc., 1958. 49 p.
- Putnam, William S., "Advanced Placement in Biology," The American Biology Teacher, Vol. 21, March 1959, pp. 85-90.
- Recognition of Exceptional Preparation. Hanover, N.H., Dartmouth College, April 1960. 20 p.
- Reichard, Joseph R., "The College Board and Advanced Placement in German, The German Quarterly, Vol. 29, Nov. 1956, pp. 220-24.
- Report of College Entrance Examination Board Advanced Placement Administrators' Conference, the University of Michigan, June 18-June 20, 1959. 17 p. (Mimeographed.)



- Report of College Entrance Examination Board Advanced Placement Administrators' Conference, Yale University, June 20-22, 1958. '5 p. (Mimeographed.)
- Report of College Entrance Examination Board Advanced Placement Conference in History, Yale University, June 25-28, 1959. 14 p. (Mimeographed.)
- The School and College Study of Admission with Advanced Standing, Reports of Committees, 1952-53. Philadelphia, The Central Committee of the Study, Aug. 1953. 193 p.
- Sobel, Eli, "UCLA's Special Program for High School Students," The Newsletter of the Inter-University Committee on the Superior Student, Vol. 2, Nov. 1959, pp. 14-17.
- Stover, W. Wallace, "Math Placement Tests Measure High School Product," Ohio Schools, Vol. 37, May 1959, pp. 42-43.
- Valley, John R, "Advanced Placement Latin Evannination Candidates," Classical Journal, Vol. 55, Feb. 1960, pp. 215-16.
- -----, "College Action on Candidates for Advanced Placement in History," Social Education, Vol. 23, Nov. 1959, pp. 330-32.
- ——, "College Actions on CEEB Advanced Placement English Examination Candidates," English Journal, Vol. 48, Oct. 1959, pp. 398-401.
- ——, "College Actions on CEEB Advanced Placement Language Examination Candidates," The Modern Language Journal, Vol. 43, Oct. 1959, pp. 261-63.
- ——, "A Report on CEEB Advanced Placement Mathematics and Natural Sciences Examinations Candidates, May 1958," The Science Teacher, Vol. 26, Oct. 1959, pp. 399, 401-02.
- Wilcox, Edward T., "Advanced Placement at Harvard," College Board_Reviews No. 41, Spring 1960, pp. 17-20.
- ——, A Report to the Faculty on the Program of Advanced Standing, Cambridge, Mass., Harvard College, April 1, 1959. 18 p.
- Addresses by Charles R. Keller, formerly Director, Advanced Placement Program, and presently Director, John Hay Fellows Program, 9 Rockefeller Plaza, New York 20, New York. (Mimeographed.)
 - "The Advanced Placement Program." Given at an instructional conference on the academically talented, sponsored by the Vermont Education Association and National Education Association, at Rutland, Vt., Apr. 25, 1959.
 - "Advanced Placement Examinations in History." Given at the Fourth Yale Conference on the Teaching of the Social Studies, sponsored by the Yale University Master of Arts in Teaching Program, New Haven, Conn., Apr. 4, 1959.
 - "Golden Triangles—In Education." Given at a meeting held under the auspices of the University of Pittsburgh's Regional Commission on the Interrelationships of Secondary Schools, Colleges, and Professional Schools, Pittsburgh, Pa., May 26, 1959.
 - "Some Historical Musings.". Given at the Advanced Placement Program Conference for School and College Teachers of History, Yale University, June 25, 1959.
 - "What Can the Advanced Placement Program Contribute to the Excellence of High School Education?" Given at a workshop of the New York State Association of Secondary School Principals Conference, Syracuse, -N.Y., Dec. 14, 1959.

